

The diagram illustrates a multi-channel receiver and transmitter system. At the top, four antenna elements are shown within a dashed box labeled 103. These antennas are connected to a central block labeled 107, which is a DUPLEXER with RX and TX ports. The RX port of the duplexer is connected to a block labeled 205, which contains 4 x RF RECEIVER MODULES. This block is connected to an ADC (209), which is connected to a DOWN CONVERTER (213). The DOWN CONVERTER is connected to TIMESLOT PROCESSORS (217). The output of the TIMESLOT PROCESSORS is connected to a HOST DSP (231). The TX port of the duplexer is connected to a block labeled 245, which contains RF TRANSMIT MODULES. This block is connected to a TRANSMIT CONTROLLER/MODULATOR (237). The output of the TRANSMIT CONTROLLER/MODULATOR is connected to the HOST DSP (231). The HOST DSP (231) is also connected to an RF/TIMING CONTROLLER (233), which is connected to the RX and TX ports of the duplexer (107). The HOST DSP (231) is also connected to HIGHER LEVEL PROCESSING. The diagram includes various interconnecting lines and arrows, some labeled with the number 4, indicating data flow and control signals.

Figure 1

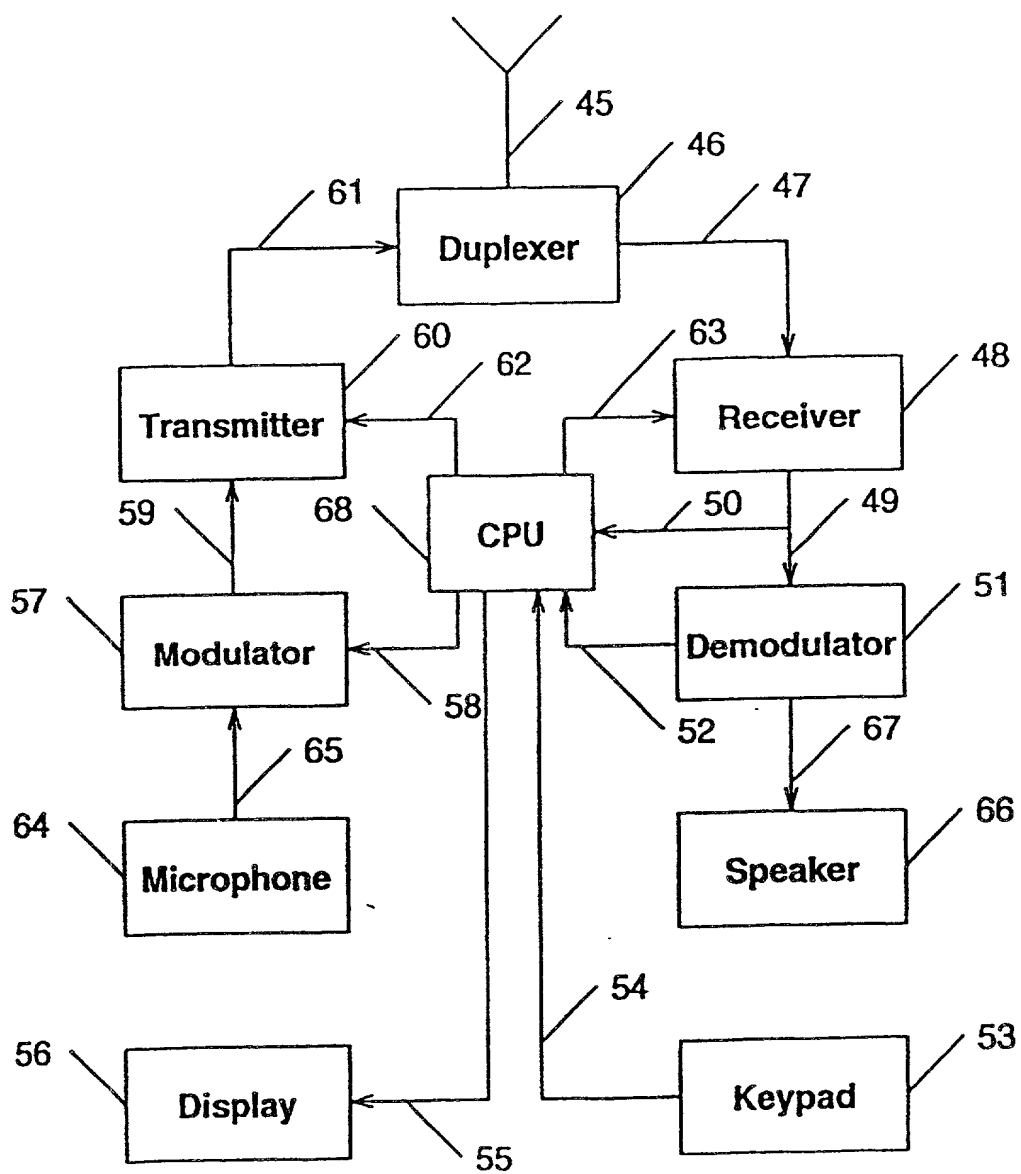


FIG. 2

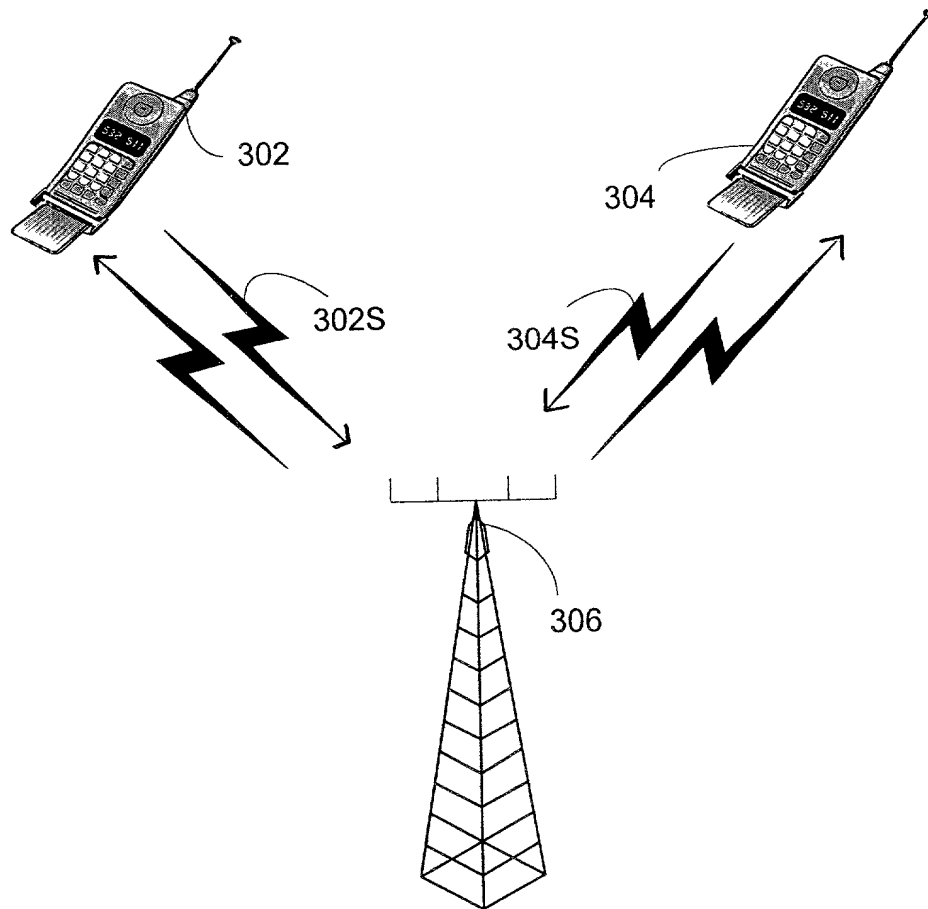


Fig. 3

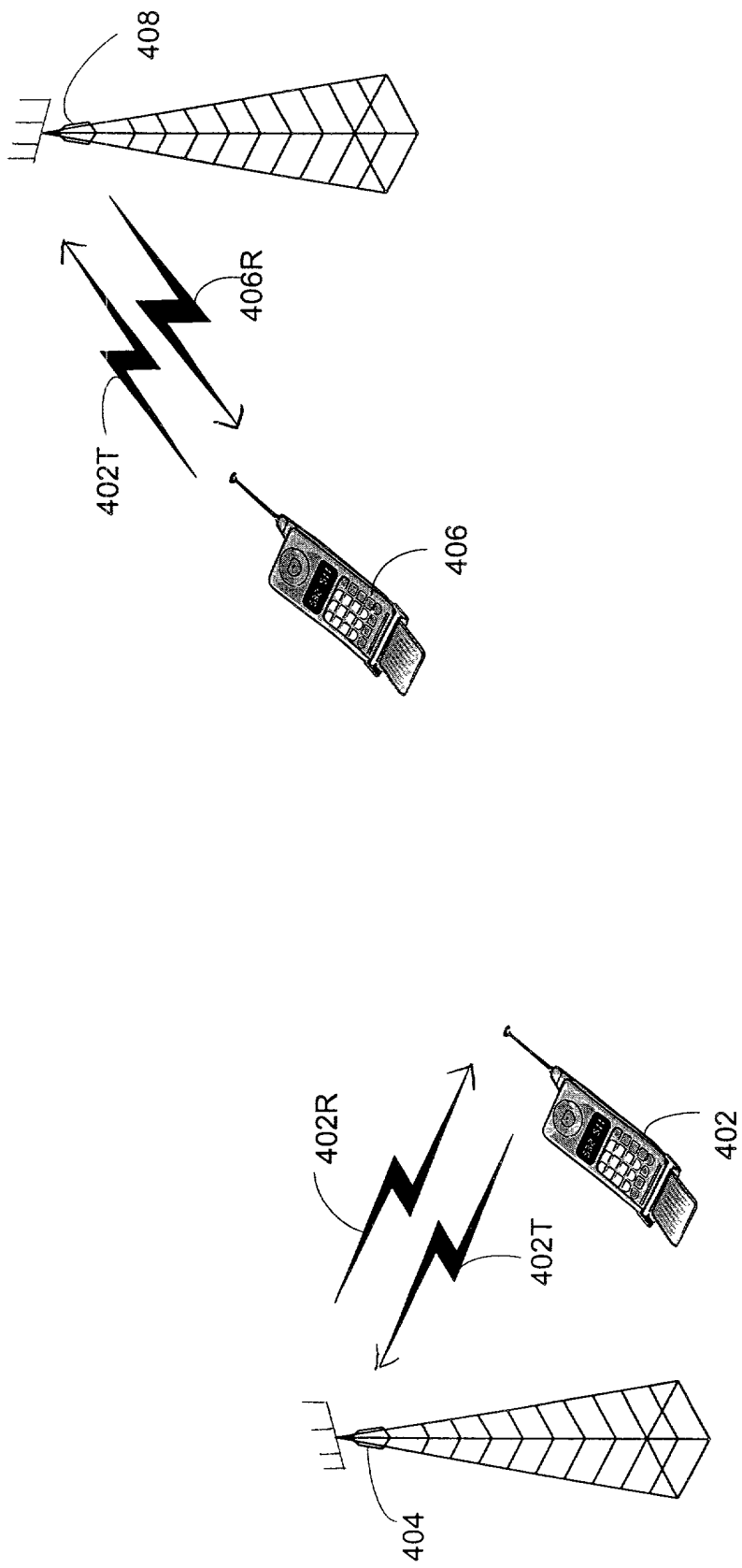


Fig. 4

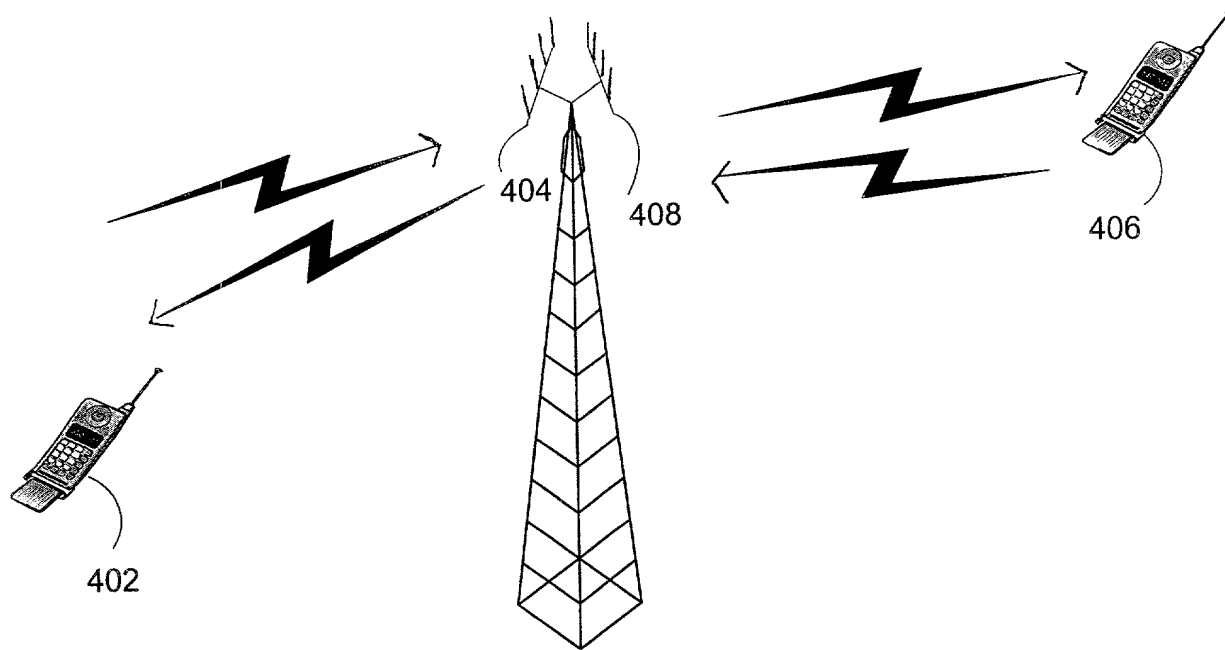


Fig. 5

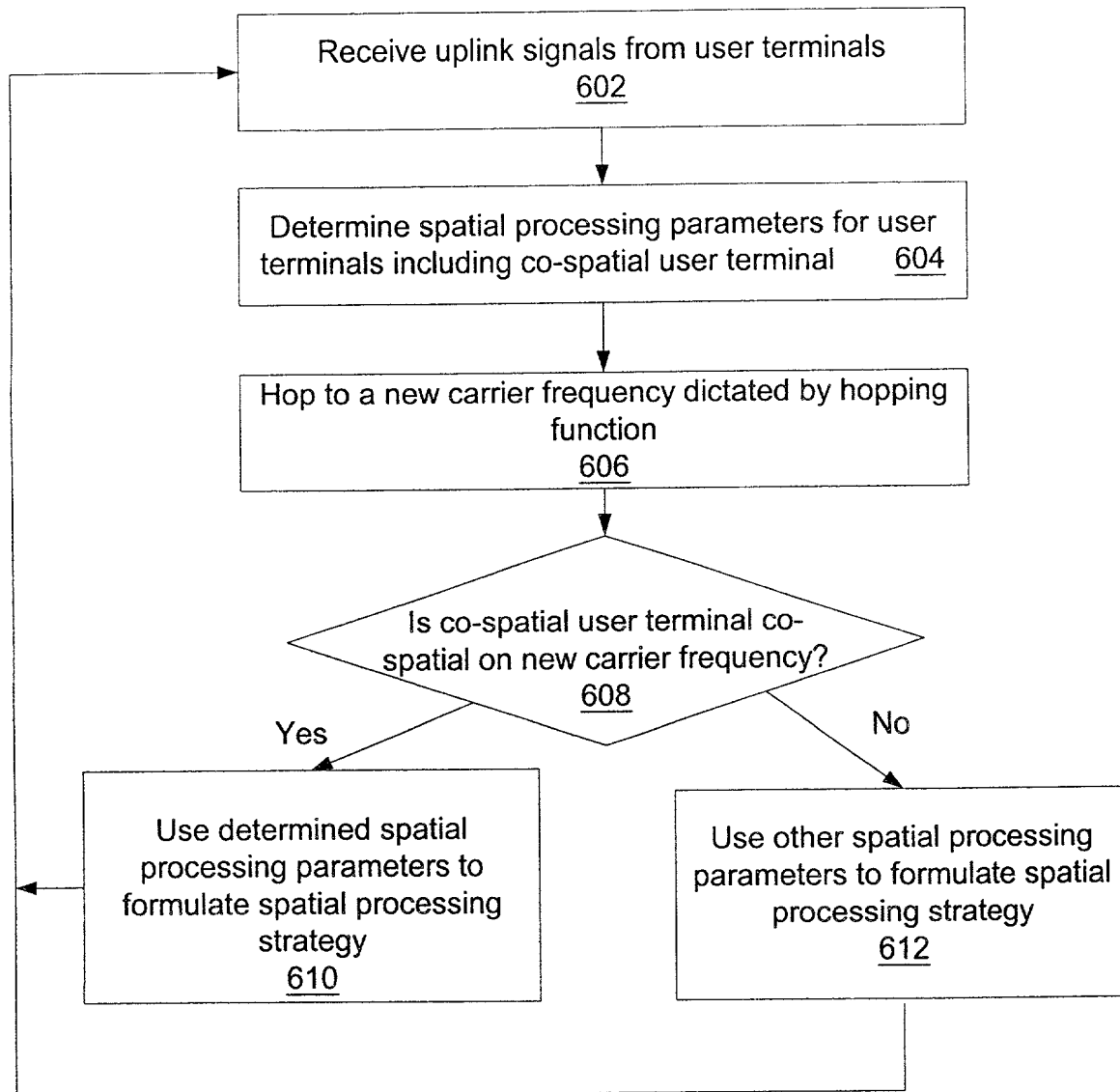


Fig. 6